

REMARKS

Applicants amended claims 1, 22 and 23; canceled claim 24; and added new claim 26. Claims 1-23, 25 and 26 are presented for examination.

Claim 1 is rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,730,733 (Mortier). As amended, claim 1 recites a medical device, comprising at least four coextruded layers comprising a first material and a second material having a different stiffness than a stiffness of the first material, wherein at least one of the layers varies in thickness axially along the device.

Mortier does not disclose or suggest a medical device having at least four coextruded layers, as claimed. Referring to Figs. 10B and 10C of Mortier (also referred to by the Examiner), Mortier describes a multi-layered catheter 110 having four layers, but the catheter includes layers that are assembled together in a step-wise fashion, not coextruded as claimed. For example, in describing the catheter shown in Fig. 10B, Mortier describes first extruding a layer 124, then applying a braid layer 118 to layer 124, then extruding a layer 126 over braid layer 118, and then extruding or applying an inner lining 120. (See, e.g., col. 10, lines 4-13.) Furthermore, when Mortier does indicate that multiple layers can be coextruded (see, e.g., col. 4, lines 64-65), there is no indication that at least one of the layers varies in thickness axially along the device, as claimed. For at least the reason that Mortier does not disclose or suggest a medical device having at least four coextruded layers, Applicants request that the rejection be withdrawn.

Claims 2-25 are rejected under 35 U.S.C. § 103(a) over Mortier in view of U.S. Patent Nos. 5,562,127 (Fanselow) and 6,776,945 (Chin). Claims 2-21 depend from claim 1. Claim 22 recites a medical device, comprising a first layer comprising a first material, and a second layer comprising a second material having a different stiffness than a stiffness of the first material, the second layer being coextruded with the first layer, wherein the first layer varies in thickness along an axial portion of the device. Claim 23 recites a method of making a medical device, comprising forming a tube comprising at least coextruded three layers comprising a first material and a second material having a different stiffness than a stiffness of the first material; and varying the thickness of at least one of the layers axially along the device. As discussed above,

Mortier does not disclose or suggest a medical device having coextruded layers, wherein at least one of the layers varies in thickness axially along the device. Fanselow and Chin do not cure the deficiencies of Mortier.

While both Fanselow and Chin describe tubing having multiple coextruded layers, neither references disclose or suggest varying the thickness of at least one of the layers, for example, to change the performance of the tubing. Rather, each reference proposes other methods of modifying the physical characteristics of the tubing. Chin describes imparting molecular helical orientation to vary stiffness. Fanselow describes selecting layers of certain compositions and/or physical properties to provide a desired performance, but does not disclose varying the thickness of a layer, even though it details the dimensions of the tubing (see, e.g., col. 10, line 33, *et. seq.*). Thus, even if Fanselow and Chin could be properly combined with Mortier, which Applicants do not concede, there is no still suggestion to vary the thickness of a coextruded layer. Applicants request that the rejection be withdrawn.

New claim 26 depends from claim 23 and is patentable for at least the same reason that claim 23 is patentable.

Applicants believe the claims are in condition for allowance, which action is requested.

Information Disclosure Statement

Applicants further request that the Examiner consider the references cited in the Information Disclosure Statement filed on December 4, 2003, and return an initialed copy of the Forms 1449. The Information Disclosure Statement is enclosed with this Reply for the Examiner's convenience.

Applicant : Douglas A. Devens, Jr.
Serial No. : 10/645,014
Filed : August 21, 2003
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Attorney's Docket No.: 10527-396001 / 02-027

Enclosed is a Petition for Extension of Time with the fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 10527-396001	Application No. 10/645,014
Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant Douglas A. Devens, Jr.	
		Filing Date August 21, 2003	Group Art Unit
(37 CFR §1.98(b))			

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	3,752,617	08/14/1973	Burlis et al.			
	AB	4,283,447	08/11/1981	Flynn			
	AC	4,581,390	04/08/1986	Flynn			
	AD	5,108,415	04/28/1992	Pinchuk et al.			
	AE	5,125,913	06/30/1992	Quackenbush			
	AF	5,156,857	10/20/1992	Wang et al.			
	AG	5,195,969	03/23/1993	Wang et al.			
	AH	5,223,205	06/29/1993	Jackowski et al.			
	AI	5,254,090	10/19/1993	Lombardi et al.			
	AJ	5,270,086	12/14/1993	Hamlin			
	AK	5,304,197	04/19/1994	Pinchuk et al.			
	AL	5,330,428	07/19/1994	Wang et al.			
	AM	5,344,401	09/06/1994	Radisch et al.			
	AN	5,358,486	10/25/1994	Saab			
	AO	5,533,985	07/09/1996	Wang			
	AP	5,755,690	05/26/1998	Saab			
	AQ	5,797,877	08/25/1998	Hamilton et al.			
	AR	5,820,594	10/13/1998	Fontirroche et al.			
	AS	5,824,173	10/20/1998	Fontirroche et al.			
	AT	5,843,032	12/01/1998	Kastenhofer			
	AU	5,951,494	09/14/1999	Wang et al.			
	AV	5,961,765	10/05/1999	Kastenhofer			
	AW	6,004,289	12/21/1999	Saab			
	AX	6,010,521	01/04/2000	Lee et al.			
	AY	6,027,477	02/22/2000	Kastenhofer			
	AZ	6,059,751	05/09/2000	Ostapchenko et al.			
	AAA	6,086,556	07/11/2000	Hamilton et al.			

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 10527-396001	Application No. 10/645,014
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Douglas A. Devens, Jr.	
		Filing Date August 21, 2003	Group Art Unit

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	ABB	6,132,824	10/17/2000	Hamlin			
	ACC	6,136,258	10/24/2000	Wang et al.			
	ADD	6,165,166	12/26/2000	Samuelson et al.			
	AEE	6,319,228	11/20/2001	Kastenhofer			
	AFF	6,464,683	10/15/2002	Samuelson et al.			
	AGG	6,471,673	10/29/2002	Kastenhofer			
	AHH	6,482,348	11/19/2002	Wang et al.			
	AII	6,488,655	12/03/2002	Wantink et al.			
	AJJ	2002/0022824	02/21/2002	Kastenhofer			
	AKK	2002/0165523	11/07/2002	Chin et al.			
	ALL	2003/0088265	05/08/2003	Kastenhofer			
	AMM	2003/0138582	07/24/2003	Miller et al.			

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	ANN	WO 01/32398	05/10/2001	WIPO				

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AOO	

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	